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July 29, 1996

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Mr. William Caton  
Federal Communication Commission  
1919 M Street, N.W. Rm 222  
Washington, D.C. 20554

RE: ET Docket No. 93-62 Ex Parte  
Guidelines for Evaluating the Environmental Effects of  
Radiofrequency Radiation

Dear Mr. Caton:

The TIA Satellite Communications Division (SCD) wishes to express its concern about the possibility that the FCC may adopt more stringent standards for RF exposure than was originally proposed in ET Docket No 93-62.

Representing the interests of the US satellite communications community, which relies on the ANSI/IEEE developed C95.1-1992 standard, the TIA SCD solicited the views of its members on the potential RF exposure order by the FCC, for preparation of comments to be filed by TIA with the FCC. The finalized set of comments that follow were provided by a number of SCD participants, coordinated broadly within the U.S. satellite industry, and reflect the views and comments of many of the companies involved and having a direct interest in this issue. TIA has shared these comments with the Satellite Industry Association (SIA) as well, and understands that SIA intends filing similar comments.

The TIA SCD supports the original Commission proposal to adopt ANSI C95.1-1992 including the low power exclusion. The TIA SCD believes that there is no new information which would lead to the conclusion that the ANSI C95.1-1992 standard should be revised.

Thank you for considering the U.S. satellite industry views on this very important issue.

Sincerely,

  
Thanos Kipreos

att.

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ET Docket No. 93-62 Ex Parte  
Guidelines for Evaluating the Environmental Effects of  
Radiofrequency Radiation

The TIA Satellite Communications Division (SCD) wishes to express its concern about the possibility that the FCC may adopt more stringent standards for RF exposure than was originally proposed in ET Docket No 93-62. In that docket the Commission proposed adoption of ANSI C95.1-1992. The TIA SCD supports the original Commission proposal to adopt ANSI C95.1-1992 including the low power exclusion. TIA with its own standards developing groups is well aware of the due process and broad review required before a standard can be approved through IEEE and subsequently through ANSI. TIA notes in fact that the use of such consensus technical standards by federal agencies has been mandated by law as a means to carry out policies (sect. 12 of public law 104-113 approved March 7 1996 )

In particular, the TIA Satellite Communications Division supports the following points made by the Electromagnetic Energy Association (EEA) in its March 29, 1996 supplement to reply comments:

- ANSI/IEEE C95.1-1992 resulted from the broadest consensus for development of RF safety standards.
- ANSI/IEEE C95.1-1992 was developed by U.S. experts following an open consensus process which required soliciting and responding to public comment.
- ANSI/IEEE C95.1-1992 provides guidance and explanations for implementing the safety criteria.
- IEEE is supported by extensive on-going standards activities within the largest professional society in the world.
- ANSI/IEEE C95.1-1992 is now being used by a number of federal agencies and companies developing cellular and personal communications services and already has been included in the FCC regulations regarding Personal Communications Services.
- Adoption of the ANSI/IEEE C95.1-1992 is consistent with Office of Management & Budget (OMB) A-119 which directs federal agencies to support and adopt voluntary standards and to coordinate standards activities with other federal agencies.
- There exist substantial detailed records (in print) of the deliberations and studies by the scientific community over the eight years ANSI/IEEE C95.1-1992 was developed.
- The ANSI/IEEE C95.1-1992 standard is basically consistent with the most modern standards throughout the world, including the laser safety standards above 300 Ghz. Adoption by the FCC of an older guideline (National Council on Radiation Protection [NCRP] 1986) would place the FCC in an isolated position among the world's regulatory agencies

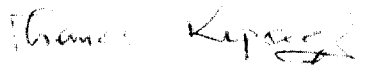
The TIA SCD believes that there is no new information which would lead to the conclusion that the ANSI C95.1-1992 standard should be revised. Based on the work of experts, the C95.1-1992 standard allows increased exposure above 300 MHz because body resonance effects

become less influential and because the skin effect reduces penetration depth beneath the surface of the body. Indeed, recently released epidemiological studies (using a very large cohort group) funded by Wireless Technology Research L. L. C., targeting the 800 Mhz cellular bands, have indicated no correlation between cellular telephone use and health effects. Experts have also pointed out that the NCRP exposure limits do not appear to be reconcilable with current infrared light maximum exposure limits, although the absorption effects are similar. Thus, there appears to be no scientific basis to drastically drop the maximum RF exposure limits above 1000 MHz. Instead, considerable scientific support has been already given in comments to the Commission since 1993 urging the adoption of the ANSI C95.1-1992 standard.

Representing the interests of the US satellite communications community, which relies on this ANSI/IEEE developed C95.1-1992 standard, the TIA Satellite Communications Division appreciates the major efforts and support of the Commission in opening new spectrum for next-generation global satellite systems. Many of these new systems will require service subscriber transmission in the several satellite frequency bands above 1000 MHz. These systems include new mobile satellite systems employing small portable handheld terminals. In addition, in the newly-opened Ka band, rain fading is a substantial impediment to the establishment of reliable links to fixed points with modest antenna diameters. Lowering of the standard in this frequency range to one-tenth of the C95.1 level, with the measurement provisions of the NCRP guidelines, will make satellite links to fixed locations with these small antennas problematic. These new systems may become unrealizable since the system availability may become so poor as to make them commercially unacceptable. It would be unfortunate indeed to prematurely stymie the development of new satellite technologies in this important sector of the U.S. industry, and disadvantage the U.S. with the respect to the rest of the world.

In conclusion, establishment of new multimedia satellite services will provide substantial societal benefits to private, public, governmental, and military sectors in the form of global multimedia connectivity supporting telemedicine, education, NII, communication to underdeveloped areas, emergency services, etc. It would seem prudent to carefully weigh the good such services would provide vis-a-vis scientifically-unsubstantiated initiatives to modify the ANSI C95.1-1992 standard which was developed with the best knowledge base available and which has yet to be contradicted by more recent data.

Respectfully submitted,



Thanos Kipreos, TIA Director, Technical & Regulatory Affairs  
Dr. Thomas Brackey, Chairman, TIA Satellite Communications Division